

National Renewable Energy Laboratory
Managed and Operated by the Alliance for Sustainable Energy, LLC
Request for Proposals (RFP) Number RGZ-7-70164

“Distributed Wind Turbine Competitiveness Improvement Project
Component Improvements and Overall System Optimization – Round 5”

REQUEST FOR PROPOSAL

READ THIS DOCUMENT CAREFULLY

This solicitation is being conducted under the procedures for competitive subcontracts established by the National Renewable Energy Laboratory (NREL). NREL will award a subcontract based on the following.

All Statement of Work (SOW) requirements being met with the best combination of:

- Technical factors (based on qualitative merit criteria), and
- Evaluated price (or cost)

Issue Date: 4/11/17

Due Date: 5/9/17

Time Due: 2:00pm. Mountain Time

Technical questions must be received in writing no later than 4/18/17

1. **Solicitation Type** Best Value Selection
Fixed Price with Price Participation

Submit offers to and request information from the NREL Contact below

2. **NREL RFP Contact** Kyndall Jackson, Subcontract Administrator
National Renewable Energy Laboratory
15013 Denver West Parkway, MS: RSF030
Golden, CO 80401
Phone: (303) 275-4253
Email: kyndall.jackson@nrel.gov

Electronic (PDF) copies of forms and appendices can be found at the following addresses:

<http://www.nrel.gov/workingwithus/forms.html>

<https://www.nrel.gov/workingwithus/standard-terms.html>

3. **Project description**

As specified in the Statement of Work (Attachment 1) titled “Distributed Wind Turbine Competitiveness Improvement Project Component Improvements and Overall System Optimization – Round 5” dated 3/11/17.

4. Proposed subcontract award and period of performance

The Alliance for Sustainable Energy, LLC has entered into Contract No. DE-AC36-08GO28308 with the Department of Energy (DOE), an agency of the U.S. Government, for the management and operation of the National Renewable Energy Laboratory (hereinafter called “NREL”). All references to “NREL” in this solicitation shall mean the Alliance for Sustainable Energy, LLC.

It is the intent of NREL to award one (1) firm fixed price with price participation subcontract(s) under this solicitation. The anticipated period of performance is twenty-one (21) months (eighteen (18) months to complete the technical work plus an additional three (3) months to complete the final reports), with an estimated budget of approximately \$350,000.00 per award amount from NREL.

A minimum price participation of 20% is required for this solicitation. Price participation is defined as a percentage of the total allowable and allocable costs under this subcontract, which may be met by contributions by the Offeror and / or by contributions from the Offeror’s lower-tier Offerors or suppliers at no cost to NREL. All costs must be allowable and allocable under the terms of the Federal Acquisition Regulations and DOE Acquisitions Regulations.

Offerors are encouraged to include any materials, supplies, or equipment in their price participation.

5. Competitive negotiated subcontract using Best Value Selection

This solicitation shall be conducted using Best Value Selection that results in an award that is most advantageous to NREL based on the best value combination of (a) evaluated qualitative merit and (b) evaluated price (cost) of the offers submitted.

Best Value Selection is based on the premise that, if all offers are of approximately equal qualitative merit, award will be made to the offeror with the lowest evaluated price (cost). However, NREL will consider awarding to an offeror with a higher evaluated price (cost) if the offer demonstrates the difference in price (cost) is commensurate with the higher qualitative merit. Conversely, NREL will consider awarding to an offeror with a lower evaluated qualitative merit if the price (cost) differential between it and other offers warrant doing so.

6. Qualitative merit criteria for Best Value Selection

The Statement of Work (Attachment 1) in this Request for Proposal (RFP) serves as NREL’s baseline requirements that must be met by each offeror.

The qualitative merit criteria establish what NREL considers the technical factors valuable in an offer. These qualitative merit criteria are performance-based and permit selection of a higher priced offer that provides higher qualitative merit.

The following qualitative merit criteria will be used to determine the technical value of the offer in meeting the objectives of the solicitation.

Each qualitative merit criteria and its assigned weight are provided below.

6.1. Demonstrates evidence that the proposed improvements are technically feasible, commercially attainable, and consistent with certification of the turbine (25%)

- a. Turbine specifications (see Attachment 5)
- b. Description of proposed improvement, identifying enhancements or advancement

- c. Description of work done to date in preparation for proposed improvement
 - d. Description of expected outcome of improvements, including metrics proposed for evaluating turbine system before and after the improvements are implemented
 - e. Description of company's QC/QA protocols for design and manufacturing
 - f. Preference will be given to proposals that incorporate comprehensive strategies of modeling and analysis, such as aeroelastic simulations and finite element analysis.
- 6.2. Demonstrates evidence that investment in improvements will contribute to a reduction in the levelized cost of energy (30%)**
- a. Quantification of component(s) improvement contribution to cost reduction from initial system cost and description of Annual Energy Production (AEP) calculation approach
 - b. Quantification of component(s) improvement contribution to cost reduction over the life of the system
 - c. Analysis of component(s) improvement contribution to market impact
 - d. Component(s) improvement has clear technical merit
- 6.3. Submit outline of a product development plan that will lead to successful market introduction and certification, or maintain existing certification, of the turbine for the US market (20%)**
- a. Soundness of product development plan to ensure turbine can be certified for the US market
 - b. Product development budget and schedule
 - c. Letters of commitment
 - d. Includes plan for sufficient resources for product testing and field service
- 6.4. Team/personnel/expertise (20%)**
- a. Qualifications of proposed project team members in relation to their responsibilities under the project. Any outside expertise that is needed to provide capabilities for the project shall be noted and the source for that capability identified.
 - b. Demonstrate ability to execute previous projects on time/ on budget
- 6.5. Additional factors for evaluation (5%)**
- The Source Evaluation Team will consider program factors in making a competitive range determination and final negotiation rank order. The program factors will not be weighted. Program factors include:
- Different manufacturers
 - Geographic diversity
 - System configuration diversity
 - CIP topic diversity
 - Turbine size diversity
 - Turbine type diversity
 - Subcontractor's price participation >20%
 - Detailed plan for proposed technical support from NREL

7. Price (cost) evaluation for Best Value Selection

After evaluation of the qualitative merit criteria, the following price (cost) evaluation will be used to determine the best value of the offer in meeting the objectives of the solicitation.

The combined qualitative merit value will be considered equally important to the price (cost).

8. Evaluation process

NREL will evaluate offers in two general steps:

Step One—Initial Evaluation

An initial evaluation will be performed to determine if all required information has been provided for an acceptable offer. Offerors may be contacted only for clarification purposes during the initial evaluation. Offerors shall be notified if their offer is determined unacceptable and the reasons for rejection will be provided. Unacceptable offers will be excluded from further consideration.

Step Two—Discussion, Selection, Negotiation, and Award

All acceptable offers will be evaluated against the Statement of Work (Attachment 1) and the qualitative merit criteria listed above. Based on this evaluation, NREL has the option, depending on the specific circumstances of the offers received, to use one of the following methods of selection:

- (a) make individual selection(s), conduct negotiations, and make an award(s);
- (b) conduct parallel negotiations with all offerors and make award(s);
- (c) conduct discussions with all offerors, select successful finalists, conduct parallel negotiations with successful finalists, and then make award(s);
- (d) conduct discussions with all offerors, conduct parallel negotiations with the finalists, select successful finalist(s), and then make award(s);
- (e) select successful finalists, conduct successive negotiations, and make successive selections and awards;
- (f) make no award(s).

9. Proposal preparation information

- a. The proposal must include a title page, including the RFP title and number, name of your organization and principal investigator (with postal address, telephone number and email address). The title should be succinct and capture the essence of your offer.
- b. Formatting instructions
 - A page is defined as one side of an 8 ½” x 11” sheet of paper.
 - Use a 12-point font.
 - Maintain at least 1-inch margins on all sides.
 - Copies must be double sided.
 - Technical proposal and cost proposal must be in separate sections.

Each proposal must be submitted in an original hard copy and to be delivered to NREL via USPS, UPS, FedEx or an official carrier by **2:00pm MST on 5/9/17**. **A PDF file of the proposal shall also be sent to kyndall.jackson@nrel.gov** by the deadline date of 2:00pm MST on 5/9/17. The emailed submission must include RFP Number **RGZ-7-70164** and the project title “Distributed Wind Turbine Competitiveness Improvement Project Component Improvements and Overall System Optimization – Round 5” in the subject line.

The electronic version of proposal shall be in PDF format and **shall be identical to the original hard copy, including all the required components as described in paragraphs c through n below.**

The proposal receipt date and time are based on the receipt of the original hard copy and not the email submission. Hand delivered proposals will not be accepted.

- c. A **technical proposal shall be submitted** in the original hard copy directed toward meeting the requirements of NREL's Statement of Work (**Attachment 1**) and qualitative merit criteria (see item 6 above). The technical proposal shall be organized in the following sections: **Technical Concept and Innovation, Product Development Plan, Cost Benefits and Qualifications and Resources.** The total proposal shall not exceed twenty (20) pages (not including resumes of team members, title page, or table of contents). Do not include any internet addresses (URLs) that provide information necessary to review the proposal; information not provided in hard copy will not be considered.

Note: A Product Development Plan shall include, but not be limited to, the following items.

- Product requirements
- Engineering effort
- Prototype development
- Testing effort
- Tooling development
- Manufacturing plan
- Certification plan

Only new work shall be considered within this proposal; previous work completed prior to the issuance of a subcontract shall not be considered for funding under this solicitation.

NREL may provide awardees with technical assistance. The Offeror shall clearly define what, if any, technical support is being requested from NREL. Technical support from NREL can only be provided contingent on how the request aligns with the program's funding availability therefore the requested technical support shall be negotiated outside the subcontract award and is not part of the overall subcontract value.

- d. A completed "**Price/Cost Proposal**" form in an original copy shall be submitted with the offer (**see NREL website above**). An individual offeror's price (cost) proposal standard format can be used if the data included are substantially the same as the NREL form. The offeror's price (cost) and delivery terms must be valid for 90 days from the date of the offer. The price (cost) proposal should include support documentation for all categories of the proposed price (cost). The price (cost) proposal should separate price (cost) for lower-tier subcontract(s) and include support documentation for all categories of the proposed lower-tier subcontract(s) price (cost).
- e. Proposals that include partnering with specific components vendors shall be considered, consistent with the evaluation criteria. If a proposal includes improving a generic part not related to a specific turbine (i.e. tower, inverter, blade etc.), the proposal shall still include a specific turbine, and ideally the OEM of that turbine, to demonstrate the improvement on a system level as opposed to a component level.

- f. Awardees from the previous CIP solicitations are eligible to submit proposals under the current solicitation. These awardees are invited to submit a proposal to build upon the existing work, or may submit a proposal for an eligible non-related work effort. Preferential considerations will not be given to previous awardees; all proposals will be evaluated against the merit criteria.
- g. Proposals should include a completed Eligibility Verification (Attachment 3).
- h. Proposals should include Figure of Merit – Cost of Energy for Distributed Wind (*includes supplemental spreadsheet*) (Attachment 4).
- i. Proposals should include Turbine Specifications (Attachment 5)
- j. Proposals should include a completed Deliverable Summary Table (Attachment 6).
- k. A completed “**Representations and Certifications for Subcontracts/Purchase Orders**” form in an original (see NREL website above).
- l. Proposals should include EITHER the “**Organizational Conflicts of Interest Representation Statement**” OR the “**Organizational Conflicts of Interest Disclosure Statement**” (see NREL website above), as applicable.
- m. A cover letter including a **summary statement** indicating acceptance of the proposed statement of work or any change with the reason(s) (Attachment 1) shall be included with the proposal. The cover letter should also include whether the Offeror is accepting or proposes a change/exception (with reason) to the subcontract schedule and the standard terms and conditions and/or the intellectual property terms and conditions in the appendices. The offeror will explain any proposed change/exception with respect to the subcontract schedule and terms and conditions. Any proposed change/exception must contain sufficient amplification and justification to permit evaluation. Such proposed changes/exceptions will not, of themselves, automatically cause an offer to be termed unacceptable. However, a large number of proposed changes/exception or one or more significant exceptions not providing any obvious benefit to the NREL or the Department of Energy may result in rejection of such offer as unacceptable.
- n. This solicitation does not commit NREL to pay costs incurred in the preparation and submission of a proposal in response to this RFP.

10. Solicitation Provisions—full text provided

a. Late submissions, modifications, and withdrawals of offers

Offers, or modifications to them, received from qualified organizations after the latest date specified for receipt may be considered if received prior to award, and NREL determines that there is a potential price (cost), technical, or other advantage, as compared to the other offers received. However, depending on the circumstances surrounding the late submission or modification, NREL may consider a late offer to be an indication of the offeror’s performance capabilities, resulting in downgrading of the offer in the technical evaluation process. Offers may be withdrawn by written notice received at any time before award. Offers may be withdrawn in person by an offeror or an authorized representative, if the representative’s identity is made known and the representative signs a receipt for the offer before award.

b. Restrictions on disclosure and use of data

Offerors who include in their proposals data that they do not want disclosed to the public for any purpose or used by the government or NREL, except for evaluation purposes shall—

1. Mark the title page with the following legend:
“This offer includes data that shall not be disclosed outside the government or NREL and shall not be used or disclosed—in whole or in part—for any purpose other than to evaluate this offer. If, however, a subcontract is awarded to this offeror as a result of—or in connection with—the submission of this data, the government or NREL shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting subcontract. This restriction does not limit the government or NREL’s right to use information contained in this data if obtained from another source without restriction. The data subject to this restriction are contained on pages [insert page and line numbers or other identification of pages] of this offer”; and
2. Mark each page of data it wishes to restrict with the following legend:
“Use or disclosure of data contained on this page is subject to the restriction on the title page of this offer.”

c. Notice of right to receive patent waiver (derived from DEAR 952.227-84) and technical data requirements.

Offerors (and their prospective lower-tier subcontractors) in accordance with applicable statutes and Department of Energy Acquisition Regulations, (derived from DEAR 952.227-84) have the right to request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of the subcontract that may be awarded as a result of this solicitation, in advance of or within thirty (30) days after the effective date of subcontracting. Even where such advance waiver is not requested or the request is denied, the subcontractor will have a continuing right during the subcontract to request a waiver of the rights of the United States in identified, individual inventions.

Domestic small business firms, educational institutions, and domestic nonprofit organizations normally will receive the clause: Patent Rights - Retention by the Subcontractor, which permits the offeror to retain title to subject inventions, except in subcontracts involving exceptional circumstances or intelligence activities. Therefore, domestic small business firms, educational institutions, and domestic nonprofit organizations normally need not request a waiver.

If an offeror’s proposal includes a lower-tier subcontract to another organization, that lower-tier organization’s business type will determine the applicable intellectual property provisions that will apply to the lower-tier subcontract. Note that a lower-tier subcontractor may apply for a patent waiver under the same conditions as the offeror.

Under a research, development, and demonstration project, the Department of Energy and NREL are unable to ascertain, prior to receipt of offers or performance of the project, their actual needs for technical data. It is believed that the requirements contained herein are the basic needs of the Department of Energy and NREL. However, if the offeror indicates in its proposal that proprietary data will be used or withheld under its proposed effort, the Department of Energy and NREL reserve the right to negotiate appropriate rights to the

proprietary data. The appropriate rights may include "Limited Rights in Proprietary Data" and/or "Subcontractor Licensing."

d. Disclaimer

NEITHER THE UNITED STATES; NOR THE DEPARTMENT OF ENERGY; NOR ALLIANCE FOR SUSTAINABLE ENERGY, LLC; NOR ANY OF THEIR CONTRACTORS, SUBCONTRACTORS, OR THEIR EMPLOYEES MAKE ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUME ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS FOR ANY PURPOSE OF ANY OF THE TECHNICAL INFORMATION OR DATA ATTACHED OR OTHERWISE PROVIDED HEREIN AS REFERENCE MATERIAL.

e. Solicitation disputes

The General Accountability Office and the Department of Energy do not accept or rule on disputes for solicitations for Requests for Proposals issued by Management and Operating Contractors for the Department of Energy (operators of Department of Energy National Laboratories). Should an offeror have any concerns regarding the NREL solicitation process or selection determination, the offeror may contact Mark Barela, Advocate for Commercial Practices, at (303) 384-7559. NREL will address each concern received from an offeror on an individual basis.

11. Solicitation provisions—incorporated by reference—general access

This solicitation incorporates one or more solicitation provisions by reference with the same force and effect as if they were given in full text. The following documents can be downloaded from the NREL **general access** websites:

<http://www.nrel.gov/workingwithus/forms.html>

<https://www.nrel.gov/workingwithus/standard-terms.html>

If requested, the NREL RFP Contact (see item 2) will make full text available upon request.

- NREL Standard Terms and Conditions:
 - Appendix B-2 dated 12/15/16
- NREL Intellectual Property Provisions:
 - Appendix C-1 dated 03/26/12; or
 - Appendix C-2 dated 03/26/12; as applicable
- NREL Representations and Certifications for Subcontracts/Purchase Orders
- NREL Price/Cost Proposal Form and Instructions
- NREL Conflicts of Interest Forms

12. Summary of Attachments

Attachment 1 – Statement of Work, dated 3/11/17

Attachment 2 – Sample Subcontract (Pro-forma) Schedule: Firm Fixed Price with Price Participation

Attachment 3 – Eligibility Verification, dated 3/13/17

Attachment 4 – Figure of Merit – Cost of Energy (Distributed Wind Generation) dated 3/9/17
(includes supplemental spreadsheet)

Attachment 5 – Turbine Specifications dated 3/8/17

Attachment 6 – Sample Deliverable Schedule

13. NAICS Code and Small Business Size Standard

- a. The North American Industry Classification System (NAICS) for this solicitation is 541990.
- b. The small business size standard for 541990 – All other Professional, Scientific and Technical Services is \$15,000,000.00 in annual receipts. (Annual receipts of a concern means the annual average gross revenue for the last three fiscal years.)

14. Notice Regarding NREL Payments to Subcontractors

It is NREL's standard practice to make all payments to domestic subcontractors via electronic (ACH) payments or to international subcontractors via wire transfers. Any Offeror receiving notification of an award under this solicitation must complete and submit a "Request for ACH/Wire Banking Information" form to the applicable NREL Subcontract Administrator. Payments to subcontractors will be deposited directly into the subcontractor's designated bank account in accordance with the banking account/wire transfer information provided on the form by an authorized company representative. An electronic (PDF) copy of the form can be found at: <https://www.nrel.gov/workingwithus/standard-terms.html>.